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动物分类学报

宁夏巨刺螨属一新种 (蜱螨亚纲, 巨刺螨科)

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摘 要 记述巨刺螨属 1新种: 泾源巨刺螨 *Macronyssus jingyuanensis* sp. nov. 标本采自宁夏回族自治区泾源县西峡区伏翼 *Pipistrellus* sp. 体, 保存于军事医学科学院微生物流行病研究所昆虫标本馆。
关键词 蜱螨亚纲, 中气门目, 巨刺螨科, 巨刺螨属, 新种.
中图分类号 Q959.226

巨刺螨属 *Macronyssus* Kolenati, 1858, 隶属于巨刺螨科 Macronyssidae Oudemans, 1936, 该属的种类主要寄生于蝙蝠类, 分布于世界多数地区, 现已记录近 50种, 我国记录有 18种, 即: 川贵巨刺螨 *M. chuanguiensis* Zhou *et* Zhang, 1996, 朝鲜巨刺螨 *M. coreanus* (Ah, 1964), 德昌巨刺螨 *M. dechangensis* Zhou *et* Zhang, 1996, 峨嵋巨刺螨 *M. emeiensis* Zhou, Wang *et* Wang, 1996, 黄巨刺螨 *M. flavus* (Kolenati, 1856), 福建巨刺螨 *M. fujianensis*, Zhou, Wang *et* Wang, 1996, 红河巨刺螨 *M. hongheensis* Gu *et* Tao, 1996, 来凤巨刺螨 *M. laifengensis* Wang *et* Shi, 1986, 日本巨刺螨 *M. japonicus* Radovsky, 1967, 异棘巨刺螨 *M. miraspinosus* Gu *et* Wang, 1985, 拟雷氏巨刺螨 *M. pararadovskyi* Tian, Jin *et* Zhang, 2009, 四棘巨刺螨 *M. quadrispinosus* Tian *et* Gu, 1992, 雷氏巨刺螨 *M. radovskyi* (Domrow, 1963), 太原巨刺螨 *M. taiyuanensis* Tian *et* Gu, 1992, 塔山巨刺螨 *M. tashanensis* Li *et* Teng, 1985, 田氏巨刺螨 *M. tieni* (Grokhovskaya *et* Nguen-Xuan-Hoe, 1961), 渡巨刺螨 *M. xianduensis* (Zhou, Tang *et* Wen, 1982), 织金巨刺螨 *M. zhijinensis* Gu *et* Wang, 1985。

记述巨刺螨属 *Macronyssus* Kolenati 1新种。文中测量单位为 μm, 括号内为测量均值。

泾源巨刺螨, 新种 Macronyssus jingyuanensis **sp. nov.** (图 1~ 10)

形态描述 雌螨 (图 1~ 5) 体黄色, 宽椭圆形, 长 667~ 806 (729), 基节Ⅳ水平处宽 409~ 505 (468)。背板近六角形, 长 570~ 591 (588), 中部宽 247~ 269 (265), 具刚毛 28对, 周围毛较长, 中部毛微小, 板上另具小孔数对。背板毛长度: F_1 21, F_3 56, V 45, T_1 53, Sc 53, ET_1 34, ET_2 38, S_1 49, S_2 49, S_3 41, S_4 34, S_5 26, S_6 11, S_7 26, S_8 6, M_5 41, M_8 26, M_{10} 26, M_{11} 26, D_{1-8} 11, I_1 19。Sc与 D_3 长度比为 5∶1。背裸露区较大, 具表皮毛 40对以上。

颚体长至颚角尖 134~ 108 (121), 基部宽 97~ 104 (100), 颚毛 3对, 均短而光滑, 外颚毛最短 15。螯钳动趾长 18~ 24 (21), 定趾具 2刺, 1刺在末端, 另 1刺在亚末端。叉毛 2分叉。

胸叉具细分支。腹面骨板为胸板、生殖板和肛板。胸板之前具明显网纹区。胸板长 54~ 65 (63), St_2 水平宽 129~ 161 (147), 后缘凹, 凹底远达不到 St_2 水平, 胸板前缘及胸毛外侧具网纹, 胸腺不明显, 具胸毛 3对和隙孔 2对, St_1 50~ 54 (52) 和 St_2 较长 51~ 54 (53), St_3 45~ 47 (46) 和 MSt 43 较短, St_1 末端接近胸板后缘, MSt在板后表皮上。生殖腹板长舌状, 长 204~ 247 (228), VI_1 水平处宽 65~ 75 (73), 布满网纹, 生殖毛 1对, 长 36~ 43 (39)。肛板倒梨形, 长 118~ 129 (124), 宽 75 ~ 86 (82), Ad 位于肛孔中横线水平, 长 22~ 23 (22.5) 短于肛孔, PA长 26~ 27 (26.5)。气门沟前端达到基节Ⅰ前部。腹表皮毛 50对以上。

各足长: Ⅰ = 408-415-420 (414), Ⅱ = 358-354-358 (357), Ⅲ = 350-351-343 (348), Ⅴ = 465-440-465 (457), 各足刚毛均短而光滑, 基节Ⅱ有 1前背刺, 基节Ⅱ~Ⅳ各有 1丘状突。

雄螨 (图 6~ 10) 体浅黄色, 骨化弱, 椭圆形, 长 538~ 602 (570), 宽 333~ 398 (366)。背板椭圆形, 长 505~ 538 (521), 宽 215, 板上刚毛同雌螨。背板毛长度: F_1 19, F_3 38, V 26, T_1 38, Sc 38, ET_1 23, ET_2 26, S_1 30, S_2 30, S_3 26, S_4 23, S_5 19, S_6 11, S_7 19, S_8 6, M_5 26, M_8 19, M_{10} 19, M_{11} 23, D_{1-8} 11, I_1 15。Sc与 D_3 长度比为 3∶1。背表皮毛 14对左右。螯钳导精趾狭窄弯曲, 长 47~ 49, 末端斜切状。

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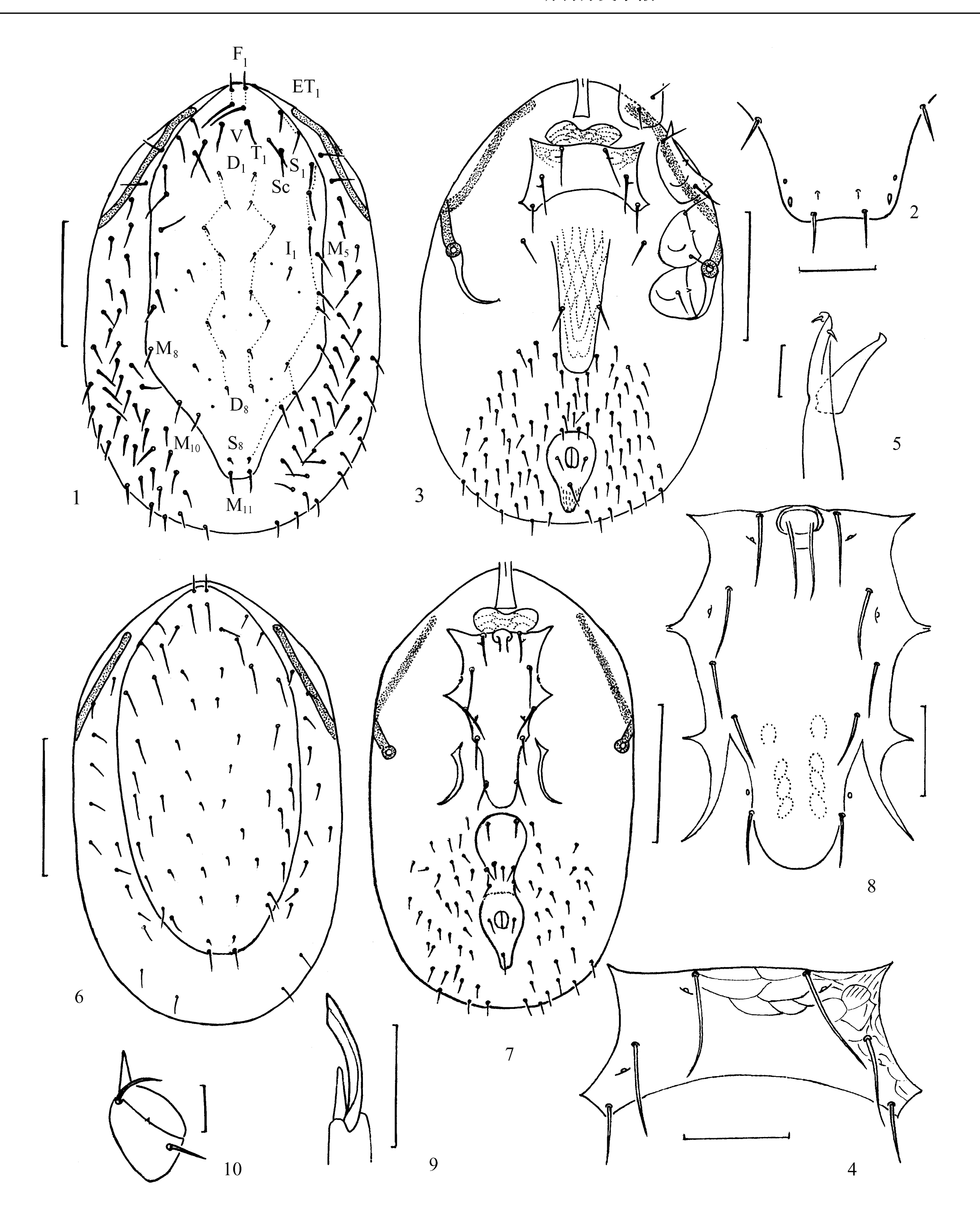


图 1~ 10 泾源巨刺螨，新种 *Macronyssus jingyuanensis* sp. nov.
♀ 1. 背面 (dorsum) 2. 背板后端 (posterior end of dorsal shield) 3. 腹面 (venter) 4. 胸板 (sternal shield) 5. 螯钳 (chela) ♂ 6. 背面 (dorsum) 7. 腹面 (venter) 8. 胸殖板 (sterno-genital shield) 9. 螯钳 (chela) 10. 基节Ⅱ (coxa Ⅱ) 比例尺 (scale bars): 1, 3, 6~ 7= 200 μm; 5= 20 μm; 2, 4, 8~ 10= 50 μm

颚毛简单，叉毛 2分叉。

腹面骨板 2块，胸殖板后部和腹肛板前部骨化弱，形状有变异。胸前区网纹同雌螨。胸殖板长 197 ~ 199 (198)，St_5 处宽 112~ 119 (115.5)，具刚毛 5对，较长，隙孔 3对。腹肛板长 202~ 206 (204)，中部收缩，最窄处宽 36~ 38 (37)，具腹毛 4对和围肛毛 3根，Ad位于肛孔中横线水平，长 18~ 22 (20) 短于 PA，PA长 22~ 25 (23.5)。腹表皮毛 24 ~ 38对，后部毛稍长，最长者 29。气门沟前端达到基节Ⅱ前部。

各足长: Ⅰ = 361 ~ 365 (363), Ⅱ = 296 ~ 314 (305), Ⅲ = 303 ~ 307 (305), Ⅳ = 390 ~ 401 (395. 5)。基节Ⅱ前背刺和足毛均同雌螨。

词源: 新种以模式标本采集地命名。

鉴别特征 新种接近于 *Macronyssus angustus* Allred, 1969; *M. crosbyi* (Ewing *et* Stover, 1915), *M. flavus* (Kolenati, 1856), *M. kolenatii* (Oudemans, 1902), *M. unidens* Radovsky, 1967, *M. yesoensis* Uchikawa, 1979 和 *M. heteromorphus* Dusbabek *et* Radovsky, 1972。与 *M. angustus* 的区别为: 新种背板后端宽, M_{11}离开板侧缘; 背中毛微小, 末端远离下位毛基部, 而 *M. angustus* 背板后端较狭, M_{11}紧靠板侧缘; 背中毛很长, 末端达到或接近下位毛基部。

与 *M. crosbyi* 的区别为: 新种生殖腹板仅有 1对毛, 而 *M. crosbyi* 生殖腹板有 5根毛。

与 *M. flavus* 的区别为: 新种背板后突较狭, 背中毛微小; 肛板较狭, 呈倒梨形, 而 *M. flavus* 背板后突较宽, 背中毛较长; 肛板前部较宽, 近三角形。

与 *M. kolenatii* 的区别为: 新种背中毛微小, 肛板倒梨形, 而 *M. kolenatii* 背中毛较长, 肛板三角形。

与 *M. unidens* 的区别为: 新种背中毛微小, St_3短于 St_1和 St_2, 生殖腹板仅有 1对毛; *M. unidens* 背中毛较长, St_3约等于 St_1和 St_2长, 生殖腹板有 3根毛。

与 *M. yesoensis* 的区别为: 新种背中毛微小, 生殖腹板仅有 1对毛, 肛板倒梨形; *M. yesoensis* 背中毛较长, 生殖腹板有 3根毛, 肛板三角形。

与 *M. heteromorphus* 的区别为: 新种雌螨肛板较狭, 倒梨形; 雄螨体后部刚毛常形, 而 *M. heteromorphus* 雌螨肛板较宽, 近五角形; 雄螨体后部刚毛粗长。

正模 ♀, 副模: 9♀♀, 2♂♂, 采自伏翼 *Pipistrellus* sp., 宁夏回族自治区泾源县西峡区, 2007-07-21。模式标本保存于军事医学科学院微生物流行病研究所昆虫标本馆, 北京。

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A NEW SPECIES OF THE GENUS *MACRONYSSUS* FROM NINGXIA, CHINA (ACARI, MACRONYSSIDAE)

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Abstract A new species of the genus *Macronyssus* is described in the present paper.

Macronyssus jingyuanensis **sp. nov.** (Figs. 1-10)

Female. Length of idiosoma 667-806 (av. 729) μm, width 409-505 (av. 468) μm at level of coxae Ⅳ. Dorsal shield 570-591 (av. 588) μm long and 247-269 (av. 265) μm wide, bearing 28 pairs of setae, of which central setae minute. Length of dorsal shield setae: F_1 21, F_3 56, V 45, T_1 53, Sc 53, ET_1 34, ET_2 38, S_1 49, S_2 49, S_3 41, S_4 34, S_5 26, S_6 11, S_7 26, S_8 6, M_5 41, M_8 26, M_{10} 26, M_{11} 26, D_{1-8} 11, I_1 19. Sc: D_3 = 5: 1. Dorsal cuticle setae more than 40 pairs. Posterior concavity of sternal shield distant from level of St_2, with 3 pairs of setae and 2 pairs of pores, St_1 and St_2 longer than St_3 and MSt. St_3 near to posterior margin of sternal shield distally, MSt on cuticle behind of the shield. Presternal reticulation region distinct. Genital shield long and narrow, reticulated, with 1 pair of setae. Anal shield inverse pear-shaped. Ad lying at level of middle of anus, shorter than anus, PA longer than anus. Peritreme reaching to anterior part of coxa Ⅰ anteriorly. Ventral cuticle setae more than 50 pairs. Fixed digit of chela with 2 spines. Coxae Ⅱ with an antero-dorsal spine respectively.

Male. Length of idiosoma 538-602 (av. 570) μm, width 333-398 (av. 366) μm. Dorsal shield 505-538 (av. 521) μm long and 215 μm wide, dorsal shield setae as in female. Length of dorsal shield setae: F_1 19, F_3 38, V 26, T_1 38, Sc 38, ET_1 23, ET_2 26, S_1 30, S_2 30, S_3 26, S_4 23, S_5 19, S_6 11, S_7 19, S_8 6, M_5 26, M_8 19, M_{10} 19, M_{11} 23, D_{1-8} 11, I_1 15. Sc: D_3 = 3: 1. Dorsal cuticle setae about 14 pairs. Sterno-genital shield with 5 pairs of setae and 3 pairs of pores. Ventro-anal shield with 4 pairs of ventral setae and 3 perianal setae. Perianal setae as in female. Ventral cuticle setae 24-38 pairs. Peritreme reaching to anterior part of coxa Ⅱ anteriorly. Spermatodactyl of chela narrow. Antero-dorsal spine of coxae Ⅱ as in female.

The new species is similar to *M. angustus* Allred, 1969, *M. crosbyi* (Ewing et Stover, 1915), *M. flavus* (Kolenati, 1856), *M. kolenatii* (Oudemans, 1902), *M. unidens* Radovsky, 1967, *M. yesoensis* Uchikawa, 1979 and *M. heteromorphus* Dusbabek et Radovsky, 1972. But it differs from *M. angustus* in the dorsal shield broader posteriorly, M_{11} distant from lateral margins of the shield, dorso-central setae minute, the tip far distant from base of next seta. In *M. angustus*, the dorsal shield narrower posteriorly, M_{11} near to lateral margins of the shield, dorso-central setae long (the tip reaching or near to base of next seta).

Differences from *M. crosbyi*: in the new species, genito-ventral shield with 1 pair of setae, while genito-ventral shield with 5 setae in *M. crosbyi*.

Differences from *M. flavus*: posterior end of dorsal shield narrower, dorso-central setae minute, anal shield narrower, pear-shaped in the new species. In *M. flavus*, posterior end of dorsal shield broader, dorso-central setae longer, anal shield broader anteriorly, triangular.

Differences from *M. kolenatii*: in the new species, dorso-central setae minute, anal shield pear-shaped, while in *M. kolenatii*, dorso-central setae longer, anal shield triangular.

Differences from *M. unidens*: in the new species, dorso-central setae minute, St_3 shorter than St_1 and St_2, genito-ventral shield with 1 pair of setae. Dorso-central setae longer, St_3 subequal to St_1 and St_2 in length, genito-ventral shield with 3 setae in *M. unidens*.

Differences from *M. yesoensis*: dorso-central setae minute, genito-ventral shield with 1 pair of setae, anal shield pear-shaped in the new species, while in *M. yesoensis*, dorso-central setae longer, genito-ventral shield with 3 setae, anal shield triangular.

Differences from *M. heteromorphus*: in the new species, anal shield of female narrow, pear-shaped, posterior idiosomal setae of male normal. In *M. heteromorphus*, anal shield of female broader, pentagonal, posterior idiosomal setae of male very long and stout.

Holotype ♀, paratypes 9♀♀, 2♂♂, off *Pipistrellus* sp., from Jingyuan County (35°31′N, 106°24′E), Ningxia Hui Autonomous Region, 21 July 2007.

Type specimens are deposited in the Insect Collection Room, Institute of Microbiology and Epidemiology, Academy of Military Medical Sciences, Beijing.

Etymology. The new species is named after the locality of type specimens.

Key words Acari, Mesostigmata, Macronyssidae, *Macronyssus*, new species.